SID 7

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AX026712
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                                      50 bp
                                               DNA
                                                       linear
                                                                PAT 16-SEP-2000
DEFINITION Sequence 14 from Patent W00039300.
ACCESSION
            AX026712
VERSION
            AX026712.1 GI:10187879
KEYWORDS
SOURCE
            synthetic construct.
  ORGANISM synthetic construct
            artificial sequence.
REFERENCE
            1 (bases 1 to 50)
  AUTHORS
            Archer, J.A. and Tuerck, J.A.
            Control of gene expression in eukaryotes
  TITLE
            Patent: WO 0039300-A 14 06-JUL-2000;
  JOURNAL
            CAMBRIDGE ADVANCED TECH (GB)
FEATURES
                     Location/Qualifiers
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                     /note="CaMVop2"
BASE COUNT
                 14 a
                         18 c
                                   9 g
                                             9 t
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  Best Local Similarity
                          100.0%; Pred. No. 0.073;
                                                  0; Indels
  Matches
          28; Conservative
                                0; Mismatches
                                                                 0; Gaps
                                                                             0:
QУ
        1 tccactgacgtaagggatgacgcacaat 28
          Db
        1 TCCACTGACGTAAGGGATGACGCACAAT 28
RESULT
AR130348
           AR130348
LOCUS
                                      98 bp
                                               DNA
                                                       linear
                                                                PAT 16-MAY-2001
DEFINITION Sequence 3 from patent US 6187996.
ACCESSION
           AR130348
VERSION
            AR130348.1 GI:14118245
KEYWORDS
SOURCE
            Unknown.
  ORGANISM
           Unknown.
            Unclassified.
            1 (bases 1 to 98)
REFERENCE
  AUTHORS
            Ishige, F., Chua, N. and Oeda, K.
  TITLE
            Plant promoter comprising a G-box element, GCCACGTGCC or
            GCCACGTGAG, and an application thereof
  JOURNAL
            Patent: US 6187996-A 3 13-FEB-2001;
FEATURES
                     Location/Oualifiers
                     1. .98
     source
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BASE COUNT
                 27 a
                         27 c
                                   19 g
                                            25 t
ORIGIN
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100.0%;

Score 28; DB 6; Length 98;

Pred. No. 0.067;

Query Match

Best Local Similarity 100.0%;

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Matches
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                                0; Mismatches
                                                 0; Indels
                                                               0; Gaps
                                                                           0;
Qу
        1 tccactgacgtaagggatgacgcacaat 28
          Db
        4 TCCACTGACGTAAGGGATGACGCACAAT 31
RESULT
         4
E13108
LOCUS
            E13108
                                     98 bp
                                              DNA
                                                     linear
                                                            PAT 24-JUN-1998
DEFINITION 35S promoter.
ACCESSION
            E13108
VERSION
            E13108.1 GI:3251920
KEYWORDS
            JP 1997131187-A/3.
SOURCE
            unidentified.
  ORGANISM
           unidentified
            unclassified.
REFERENCE
            1 (bases 1 to 98)
  AUTHORS
            Ishige, I., Chiyua, N. and Oita, K. .
  TITLE
            PLANT PROMOTER AND ITS UTILIZATION
  JOURNAL
            Patent: JP 1997131187-A 3 20-MAY-1997;
            SUMITOMO CHEM CO LTD
COMMENT
            OS
                Unknown
                JP 1997131187-A/3
            PΝ
            PD
                20-MAY-1997
                07-JUN-1996 JP 1996145492
            PF
                14-JUL-1995 JP 95P
                                    178730, 05-SEP-1995 JP 95P
                                                                 227967 PI
            ISHIGE IKUJI, CHIYUA NAMUUHAI, OITA KENJI
                C12N15/09,A01H5/00,C07H21/04,C12N5/10,(C12N5/10,C12R1:91); CC
             strandedness: Double;
            CC
                topology: Linear;
                                Location/Qualifiers
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                Key
            FH
           FT
                source
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                        27 c
                                 19 g
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                                               0; Indels
                                                               0; Gaps
                                                                           0;
QУ
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          Db
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RESULT
AR130349
LOCUS
           AR130349
                                    102 bp
                                             DNA
                                                     linear
                                                              PAT 16-MAY-2001
DEFINITION Sequence 4 from patent US 6187996.
ACCESSION
           AR130349
```

```
AR130349.1 GI:14118246
VERSION
KEYWORDS
SOURCE
            Unknown.
  ORGANISM
           Unknown.
            Unclassified.
REFERENCE
           1 (bases 1 to 102)
  AUTHORS
            Ishige, F., Chua, N. and Oeda, K.
  TITLE
            Plant promoter comprising a G-box element, GCCACGTGCC or
            GCCACGTGAG, and an application thereof
  JOURNAL
            Patent: US 6187996-A 4 13-FEB-2001;
FEATURES
                    Location/Qualifiers
    source
                    1. .102
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BASE COUNT
                28 a 27 c 21 g
                                           26 t
ORIGIN
                         100.0%; Score 28; DB 6; Length 102;
  Query Match
  Best Local Similarity 100.0%; Pred. No. 0.067;
 Matches 28; Conservative 0; Mismatches 0; Indels
                                                                           0;
Qу
       1 tccactgacgtaagggatgacgcacaat 28
         8 TCCACTGACGTAAGGGATGACGCACAAT 35
Db
RESULT
AR130350/c
           AR130350
                                    102 bp
                                              DNA
                                                     linear PAT 16-MAY-2001
DEFINITION Sequence 5 from patent US 6187996.
           AR130350
ACCESSION
           AR130350.1 GI:14118247
VERSION
KEYWORDS
SOURCE
           Unknown.
  ORGANISM Unknown.
           Unclassified.
           1 (bases 1 to 102)
REFERENCE
           Ishige, F., Chua, N. and Oeda, K.
 AUTHORS
  TITLE
           Plant promoter comprising a G-box element, GCCACGTGCC or
           GCCACGTGAG, and an application thereof
           Patent: US 6187996-A 5 13-FEB-2001;
  JOURNAL
FEATURES
                    Location/Qualifiers
    source
                    1. .102
                    /organism="unknown"
BASE COUNT
                26 a
                       20 c
                                 28 g
                                           28 t
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 Matches 28; Conservative
                              0; Mismatches
                                               0; Indels
                                                               0; Gaps
                                                                           0;
Qу
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         99 TCCACTGACGTAAGGGATGACGCACAAT 72
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RESULT
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ID
XX
AC
     AAQ12193;
XX
DT
     11-SEP-1991
                  (first entry)
XX
DΕ
     ASF-1 binding site from CaMV 35S wild-type promoter.
XX
KW
    Activation sequence factor 1; ASF-1; roots; ss.
XX
OS
     Cauliflower mosaic virus.
XX
FΗ
                     Location/Qualifiers
     Kev
FT
                     5..32
     misc binding
FT
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FT
                     /label= protected region detected by DNAse I
FT
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FT
                     8..28
     protein_bind
FT
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FT
                     /label= ASF-1 binding site
FT
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FT
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FT
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     repeat unit
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FT
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XX
PN
     US5023179-A.
XX
PD
     11-JUN-1991.
XX
PF
     14-NOV-1988;
                    88US-0272169.
XX
PR
     14-NOV-1988;
                    88US-0272169.
XX
PA
     (LAME/) LAM E.
XX
PI
     Lam E, Benfey PN, Gilmartin PM,
                                        Chua NH;
XX
     WPI; 1991-192554/26.
DR
XX
PT
     Nucleotide promoter sequence improving gene expression in roots -
PT
     is binding site for activation sequence factor, isolated from
PT
     CaMV 35S promoter.
XX
PS
     Claim 1; Fig 2; 8pp; English.
XX
CC
     The sequence represents nucleotides -90 -> -50 of the CaMV 35S
CC
     promoter. The binding site for the AFS-1, a protein isolated from
CC
     aetiolated peas, has been localised to a 21 bp sequence which
     includes the two pentanucleotide repeats. Studies of deletion and
CC
CC
     subtitution mutants revealed that binding is abolished by mutation
CC
     of these repeats but is unchanged or enhanced by mutation of the two
```

CC CAAT boxes. The promoter sequence enhances expression of genes in roots and can used to alter the specificity of other plant promoters. CC Insertion of the sequence at posn. -55 of the RUBISCO 3A promoter (specific for green tissue) or introduction by mutation in this CC region causes substantial expression in roots. CC See also AAQ12194 and AAQ12195.

XX SQ Sequence

Sequence 40 BP; 12 A; 13 C; 7 G; 8 T; 0 other;

SUMMARIES

Result			* ^				
		Q	Query	T	D.D.	TD	Daganintian
	No.	Score	Match	Length	מע –	ID 	Description
	1	28	100.0	28	6	AX207054	AX207054 Sequence
	2	28	100.0	50	6	AX026712	AX026712 Sequence
	² 3	28	100.0	98	6	AR130348	AR130348 Sequence
	4	28	100.0	98	6	E13108	E13108 35S promote
	5	28	100.0	102	6	AR130349	AR130349 Sequence
С	6	28	100.0	102	6	AR130350	AR130349 Sequence
C	7	28	100.0	102	6	E13109	E13109 Plant promo
С	8	28	100.0	102	6	E13110	E13110 Plant promo
C	9.	28	100.0	113	6	AR084230	AR084230 Sequence
	10	28	100.0	113	6	I90373	
_	11	28			6		I90373 Sequence 17
C		28	100.0	117		AR084231	AR084231 Sequence
С	12		100.0	117	6	I90374	190374 Sequence 18
	13	28	100.0	174	8	AF434749	AF434749 Zea mays
	14	28	100.0	189	6	AX164073	AX164073 Sequence
C	15	28	100.0	197	8	AF434747	AF434747 Zea mays
C	16	28	100.0	198	6	AX207117	AX207117 Sequence
	17	28	100.0	199	8	AF434746	AF434746 Zea mays
	18	28	100.0	199	8	AF434748	AF434748 Zea mays
С	19	28	100.0	199	8	AF434750	AF434750 Zea mays
	20	28	100.0	206	6	AX247517	AX247517 Sequence
	21	28	100.0	210	14	S51061	S51061 35S {promot
	22	28	100.0	240	6	AX033493	AX033493 Sequence
	23	28	100.0	309	6	AX044092	AX044092 Sequence
	24	28	100.0	314	6	AX207114	AX207114 Sequence
	25	28	100.0	331	6	BD001990	BD001990 A transge
	26	28	100.0	332	6	E01311	E01311 Cauliflower
	27	28	100.0	333	6	I04847	I04847 Sequence 3
	28	28	100.0	348	6	AX207116	AX207116 Sequence
	29	28	100.0	354	12	ARCAMVPR	X04879 CaMV promot
С	30	28	100.0	390	12	SC0308514	AJ308514 Synthetic
С	31	28	100.0	392	6	AX207113	AX207113 Sequence
	32	28	100.0	413	6	AX207112	AX207112 Sequence
C	33	28	100.0	423	14	CMV7626	AJ007626 Culiflowe
	34	28	100.0	439	6	A41016	A41016 Sequence 3
	35	28	100.0	439	6	AR082579	AR082579 Sequence
	36	28	100.0	439	6	I28254	I28254 Sequence 3
	37	28	100.0	446	6	A78762	A78762 Sequence 23
	38	28	100.0	446	6	AR014735	AR014735 Sequence
	39	28	100.0	470	6	AX026717	AX026717 Sequence
	40	28	100.0	480	12	SYNCAMVCM5	M74305 Synthetic e
С	41	28	100.0	485	14	CMV7625	AJ007625 Cauliflow
	42	28	100.0	532	6	AR110594	AR110594 Sequence
	43	28	100.0	532	6	AR150993	AR150993 Sequence
	44	28	100.0	532	6	AR152416	AR152416 Sequence
	45	28	100.0	532	6	AR152425	AR152425 Sequence